INDEX

Abnormalities, postural, and central excitatory state, 393
Accommodation, breakdown of, 55
Acetylcholine, relation of fibrillation to, in denervated skeletal muscle, 357
ACHESON, G. H., LEE E. S., and MORISON, R. S., A deficiency in the phrenic respiratory discharges parallel to retrograde degeneration, 269
Acidosis, effect on cortical electrical activity and blood flow, 261
Acoustic area of monkey, 49
Activity, cortical, effects of intensity and wave length on, 483
ADES, H. W., and FELDER, R., The acoustic area of the monkey (*Macaca mulatta*), 49
Alkalosis, effect on cortical electrical activity and blood flow, 261
ANDERSON, R., See DOW, R. S., 363
ARVANITAKI, A., Effects evoked in an axon by electric activity of a contiguous one, 89
Audiogenic seizures in rat, 185
Axon, electric activity of, 89

BERNHARD, C. G., Isolation of retinal and optic ganglion response of the eye in *Dytiscus*, 32
——, ——, and GRANIT, R., Stimulus frequency as a means of analyzing synaptic activity, 381
——, ——, ——, ——, and SKOGLUND, C. R., The breakdown of accommodation-nerve as model sense-organ, 55
Blood flow, effects of alkalosis and acidosis on, 261

CAMPBELL, B., See GRUNDFEST, H., 275
Cat, cerebellar action potentials in, 121
——, dorsal spino-cerebellar tracts, 275
Cerebellar action potentials and cerebral cortex, 121
——, in rat, 363
lesions, positional nystagmus, 247
Chimpanzee, section of medial lemniscus, 69
Choline esterase and respiration, 499
COATES, C. W., See NACHMANSOHN, D., 499
CORBIN, K. B., See HARRISON, F., 465
Cortex, cerebral, cerebellar action potentials and, 121
——, ——, effect on electroencephalogram of lesions of, 335
——, ——, excitability of in infant monkey, 231
Cortical activity, modification by stimulation, 349
Cortical electrical activity, effect of alkalosis and acidosis on, 261
COX, R. T., See NACHMANSOHN, D., 499

Degeneration, retrograde, and phrenic respiratory discharges, 269
DENSLOW, J. S., and HASSETT, C. C., The central excitatory state associated with postural abnormalities, 393
Dorsal root, potentials recorded from, 423
DOW, R. S., Cerebellar action potentials in response to stimulation of the cerebral cortex in monkeys and cats, 121
——, ——, and ANDERSON, R., Cerebellar action potentials in response to stimulation of proprioceptors and exteroceptors in the rat, 363
Dytiscus, retinal and optic ganglion response, 32

ECCLES, J. C., KATZ, B., and KUFFLER, S. W., Effect of eserine on neuromuscular transmission, 211
Electric activity of axon, 89
—— changes at nerve muscle junction, 18
Electroencephalogram of monkey, 325, 335
Enzymes, localization of, in nerves, 109
Eserine, effect on neuromuscular transmission, 211
Excitability of cerebral cortex in monkey, 231
Excitation of phrenic motor neurons, 75
Exteroceptors, stimulation of in rat, 363
Eye, retinal and optic ganglion response, 32

FELDER, R. See ADES, H. W., 49
Fibrillation, relation to acetylcholine and potassium, 357
FINGER, F. W., See LINDSLEY, D. B., 185
FOERSTER, OTFRID, *obituary*, 1
Frog, intersegmental inhibition in, 459
Frontal lobes, delayed response in monkey after removal of, 295

Ganglia, basal, effect on electroencephalogram of lesions, 335
GRAHAM, H. T., The effects of polarization on nerve action potentials, 137
GRANIT, R., See BERNHARD, C. G., 55, 381
GRUNDFEST, H., and CAMPBELL, B., Origin, conduction and termination of impulses in dorsal spino-cerebellar tracts of cats, 275

HALSTEAD, W. C., KNOX, G. W., and WALKER, A. E., Modification of cortical activity by means of intermittent photic stimulation in the monkey, 349
——, ——, ——, ——, WOOLF, J., and WALKER, A. E., Effects of intensity

and wave length on driving cortical activity in monkeys, 483
HARRISON, F., and CORBIN, K. B., Oscillographic studies on the spinal tract of the fifth cranial nerve, 465
HASSETT, C. S., See DENSLOW, J. S., 393
HENRY, C. E., See LINDSLEY, D. B., 185

Impulses in dorsal spino-cerebellar tracts in cats, 275
Inhibition, intersegmental, in spinal cord, of frog, 459
—— of phrenic motor neurons, 75
Iris, responses to prolonged stimulation, 27

KATZ, B. Impedance changes in frog's muscle associated with electronic and "endplate" potentials, 169
——, ——, See ECCLES, J. C., 211
KENNARD, M. A., and MCCULLOCH, W. S., Excitability of cerebral cortex in infant *Macaca mulatta*, 231
——, ——, and NIMS, L. F., Changes in normal electroencephalogram of *Macaca mulatta* with growth, 325
——, ——, ——, ——, Effect on electroencephalogram of lesions of cerebral cortex and basal ganglia in *Macaca mulatta*, 335
KNOX, G. W., See HALSTEAD, W. C., 349, 483
KUFFLER, S. W., Electric potential changes at an isolated nerve-muscle junction, 18
——, ——, Further study on transmission in an isolated nerve-muscle fibre preparation, 309
——, ——, Responses during refractory period at myoneural junction in nerve-muscle fibre preparation, 199
——, ——, See ECCLES, J. C., 211

LEE, E. S., See ACHESON, G. H., 269
Lemniscus, medial, effect of section of, 69
LINDSLEY, D. B., FINGER, F. W., and HENRY, C. E., Some physiological aspects of audiogenic seizures in rats, 185
LLOYD, D. P. C., Mediation of descending long spinal reflex activity, 435
——, ——, Stimulation of peripheral nerve terminations by active muscle, 153
LUBIN, A. J., and PRICE, J. C., Effect of alkalosis and acidosis on cortical electrical activity and blood flow, 261
LUCO, J. V., and SALVESTRINI, H., Responses of the iris to prolonged stimulation of its parasympathetic nerve supply, 27

MCCULLOCH, W. S., See KENNARD, M. A., 231
MACHADO, A. L., See NACHMANSOHN, D., 499
MAGLADERY, J. W., and SOLANDT, D. Y., Relation of fibrillation to acetylcholine and potassium sensitivity in denervated skeletal muscle, 357
——, ——, See SOLANDT, D. Y., 373
MALMO, R. B., Interference factors in delayed response in monkeys after removal of frontal lobes, 295
Monkey, acoustic area of, 49
—— cerebellar action potentials in, 121
—— driving cortical activity in, 483
—— electroencephalogram of, 325, 335
—— infant, excitability of cerebral cortex in, 231
—— interference factors in, after removal of frontal lobes, 295
—— intermittent photic stimulation in, 349
—— lesions of cerebral cortex and basal ganglia, 335
—— section of medial lemniscus in, 69
MORISON, R. S., See ACHESON, G. H., 269
Motoneuron, effects of presynaptic volleys, 235
Muscle, impedance changes in frog, 169
——, denervated skeletal, relation of fibrillation, 257
——, skeletal, effect of motor neuron lesions on, 373
——, stimulation of peripheral nerve terminations by, 153

NACHMANSOHN, D., COX, R. W., COATES, C. W. and MACHADO, A. L. Action potential and enzyme activity in the electric organ of *Electrophorus electricus* (Linnaeus). I. Choline esterase and respiration, 499
NACHMANSOHN, D., and STEINBACH, H. B., Localization of enzymes in nerves. I. Succinic dehydrogenase and vitamin B_1, 109
Nerve action potentials, effect of polarization, 137
——, crural, reflex discharges in, 487
——, fifth cranial, oscillographic studies on spinal tract of, 465
——, localization of enzymes in, 109
——, model sense-organ, 55
—— peripheral terminations, 153
—— trunk, potentials recorded from, 423
Nerve-muscle fibre preparation, responses at myoneural junction, 199
——, transmission in, 309
Nerve-muscle junction, electric changes, 18
Neuromuscular transmission, effect of eserine on, 211
Neuron, motor, effect of lesions of, 373
——, phrenic motor, 75

NIMS, L. F., See KENNARD, M. A., 325, 335
Nystagmus, positional in cerebellar lesions, 247

Oscillographic studies of fifth cranial nerve, 465

Pain, visceral responses to, 417
PARRACK, H. O., Potentials recorded from the nerve trunk and the dorsal root by micro-electrodes, 423
Phrenic respiratory discharges, 269
PITTS, R. F., Excitation and inhibition of phrenic motor neurones, 75
——, ——, The function of components of the respiratory complex, 403
Polarization and nerve action potentials, 137
Potassium, relation of fibrillation to, 357
——, and denervated skeletal muscle, 357
Potentials, electronic and "endplate," 169
Presynaptic volleys, effect on spread of impulses of motoneuron, 235
PRICE, J. C., See LUBIN, A. J., 261
Proprioceptive functions, effect of section of medial lemniscus on, 69
Proprioceptors, stimulation of in rat, 363

Rat, audiogenic seizures in, 185
——, cerebellar action potentials in, 363
——, stimulation of exteroceptors in, 363
——, stimulation of proprioceptors in, 363
Reflex activity, spinal, 435
—— discharges of crural nerve, 487
Refractory period, responses during, 199
RENSHAW, B., Effects of presynaptic volleys on spread of impulses over the soma of the motoneuron, 235
——, ——, Reflex discharges in branches of the crural nerve, 487
Respiratory complex, function of components, 403
Response, delayed, in monkey, interference factors, 295

SALVESTRINI, H., See LUCO, J. V., 27
SATTLER, D. G., Absence of local sign in visceral responses to pain, 417
SCALA, N. P., See SPIEGEL, E. A., 247
SJÖQVIST, O., and WEINSTEIN, E. A., The effect of section of the medial lemniscus on proprioceptive functions in chimpanzees and monkeys, 69
SKOGLUND, C. R., See BERNHARD, C. G., 55
SOLANDT, D. Y., and MAGLADERY, J. W., A comparison of effects of upper and lower motor neurone lesions on skeletal muscle, 373
——, ——, See MAGLADERY, J. W., 357
SPIEGEL, E. A., and SCALA, N. P., Positional nystagmus in cerebellar lesions, 247
Spino-cerebellar tracts, dorsal, 275
STEINBACH, H. B., See NACHMANSOHN, D., 109
Stimulus frequency and synaptic activity, 381
Stimulation, intermittent photic, in monkey, 349
Succinic dehydrogenase, 109
Synaptic activity and stimulus frequency, 381

TERZIOGLU, M., See WINTERSTEIN, H., 459

Visceral responses to pain, 417
Vitamin B_1, 109

WALKER, A. E., See HALSTEAD, W. C., 349, 483
WEINSTEIN, E. A., See SJÖQVIST, O., 69
WINTERSTEIN, H., and TERZIOGLU, M. Intersegmental inhibition in the spinal cord of frog, 459
WOOLF, J., See HALSTEAD, W. C., 483